

Date: Tue, 2 Nov 93 04:30:39 PST
From: Ham-Homebrew Mailing List and Newsgroup <ham-homebrew@ucsd.edu>
Errors-To: Ham-Homebrew-Errors@UCSD.Edu
Reply-To: Ham-Homebrew@UCSD.Edu
Precedence: Bulk
Subject: Ham-Homebrew Digest V93 #91
To: Ham-Homebrew

Ham-Homebrew Digest Tue, 2 Nov 93 Volume 93 : Issue 91

Today's Topics:

 6JS6C Tubes Wanted!
 Building Yagis
 Help: Need Manual for hp 0-scope
 Homebrew kit source (2 msgs)
 How to calibrate a DVM (2 msgs)
 Receiver PCB's For Sale
 setting up a work bench. (2 msgs)

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>

Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>

Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Homebrew Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/ham-homebrew".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 30 Oct 93 11:44:11 EDT
From: psinntp!arrl.org@uunet.uu.net
Subject: 6JS6C Tubes Wanted!
To: ham-homebrew@ucsd.edu

Greetings!

I'm looking for a pair (maybe 2) of 6JS6C TV sweep tubes to put in
an older Yaesu FT-101.

Think "reasonably priced," please!

73,

--Kirk, NT0Z

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=====
Kirk Kleinschmidt, NT0Z          | Tel   203-666-1541 9-5 EST
QST Assistant Managing Editor    | Fax   203-665-7531 24 hrs
ARRL HQ, 225 Main St, Newington, CT 06111 | BBS   203-666-0578 24 hrs
e-mail: kirk@arrl.org           | GEnie K.KLEINSCHMI
=====
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Date: 1 Nov 93 17:02:09 GMT
From: psinntp!arrl.org@uunet.uu.net
Subject: Building Yagis
To: ham-homebrew@ucsd.edu

In rec.radio.amateur.homebrew, cravitma@cps.msu.edu (Matthew B Cravit) writes:

>I am interested in trying to build a Yagi antenna (for 2m, I think,
>initially -- I may try others later). If anyone has any formulas for
>element length, spacing, etc, construction tips or similar, or
>pointers to this info on Internet, and could email me, I would
>appreciate it. In particular, I need to know how to calculate the
>element length and spacing.
>

The element length and spacing is pretty straightforward with
computer modeling.

However, has anyone been able to accurately model distributed
matching networks--to design Gamma or T matches that don't require
tweaking to get going?

Zack Lau KH6CP/1

Internet: zlau@arrl.org "Working" on 24 GHz SSB/CW gear
Operating Interests: 10 GHz CW/SSB/FM
US Mail: c/o ARRL Lab 80/40/20 CW
225 Main Street Station capability: 1.8 MHz to 10 GHz
Newington CT 06111 modes: CW/SSB/FM/packet
amtor/baudot
Phone (if you really have to): 203-666-1541

Date: 1 Nov 93 13:18:06 CST
From: timbuk.cray.com!hemlock.cray.com!cherry10!dadams@uunet.uu.net
Subject: Help: Need Manual for hp 0-scope
To: ham-homebrew@ucsd.edu

(Also my impression of the MN hamfest.)

Among the bargains I found at the Hamfest this weekend in St. Paul MN, was the following Oscilloscope for which I now need manuals etc:

140A Oscilloscope Hewlett Packard

I don't know the age of this beast. It is quite heavy.
It has the following modules:

1423A Time Base Hewlett Packard

1402A DC 20MCI6CMI Dual Trace Amplifier Hewlett Packard.

I don't know if it works at the moment. I still have no power chord or test probes. Then I paid a total of \$17.50, so if it never works it wasn't too much of a loss, and if it does work I really have a nice find.

Can anyone tell me anything more about this unit? How old would it be?

How can I tell what the maximum frequency it can handle is?

Am I resigned to paying several times the price of the scope for the test probes? (I need 2 of them.)

Does anyone know how I can find a service manual? Other manuals? Help!

_____hamfest observations_____

In general I felt that there was not much radio equipment and lots of computer equipment at this hamfest. There were quite a few oscilloscopes there, so bargains were to be had. This pleased me since this was on my shopping list.

I got a nice temperature controled soldering iron. (Hexacon Therm-o-trac \$20)

I didn't see a single straight key.

I saw many glow in the dark boat anchors going for many hundreds of dollars. (Ok, I didn't see them go, but that was what was being asked. Sombody had a couple of nice anchors from "Collins". One for \$300, and one for \$200. Another person had a "Schwan" was it? 100 watts on 10 and 11 meters. Glow in the dark rig. He wanted \$200, and then "\$175, but that is my best offer." I saw a HW 101 going for \$100. I probably should have taken that one. Someone else did after I passed it up. I saw those others all there at closing time though.)

Sourdough and Ham KG0IO/AE

| | |

--David C. Adams dadams@cray.com
Statistician
Cray Research Inc.

| | | obten comida,
| | | y sal de aqui!
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(____)
...
... ..

Date: 1 Nov 93 16:29:04 GMT
From: ogicse!emory!europa.eng.gtefsd.com!howland.reston.ans.net!
usenet.ins.cwru.edu!slc6!trier@network.ucsd.edu
Subject: Homebrew kit source
To: ham-homebrew@ucsd.edu

In article <1993Nov1.154901.17367@sarah.albany.edu>,
J Dugan <jfd43@csc.albany.edu> wrote:
> There is also a 2m transceiver listed at 149.95, with a case
> and knob kit for 24.94 extra. They claim appx. 5 watts RF out, ...

Interesting! That sounds very much like the Ramsey 2m transceiver kit.
JDR OEMs a lot of stuff from others, so that would make sense.

I wonder if the CW transceivers are also relabelled Ramsey kits?

Stephen

--

Stephen Trier KB8PWA "[I]t's time to put your power supply under the
Work: trier@ins.cwru.edu cardboard pyramid in the fridge with the oranges
Home: sct@po.cwru.edu and razor blades under it."
- jangus@skyld.tele.com

Date: Mon, 1 Nov 93 15:49:01 GMT
From: saimiri.primate.wisc.edu!news.crd.ge.com!sarah!thor.albany.edu!
jfd43@ames.arpa
Subject: Homebrew kit source
To: ham-homebrew@ucsd.edu

Received today a new flier from JDR Microdevices
2233 Samaritan Drive
San Jose, CA , 95124

Tel. 408-599-1200

In the "Components " flier, pp 38-40 there are several low-kost kits which may be of interest to readers of this newsgroup ; transmitters for 20,40 and 80m cw (about 1 watt out) at \$ 29.95; receivers for same at \$ 29.95. There is also a 2m transceiver listed at 149.95, with a case and knob kit for 24.94 extra. They claim appx. 5 watts RF out, appx 2 watts audio out from rcvr, dedicated packet connector (5 pin DIN), synthesized freq. control, 12 cha. as ssupplied, and expandable using remote switching.

I have no connection with JDR other than as a satisfied customer, passing this along for info to those who are looking.

73,
J. Dugan W2IAX
email jfd43@thor.albany.edu

Date: 1 Nov 1993 19:39:15 GMT
From: dog.ee.lbl.gov!agate!spool.mu.edu!nigel.msen.com!ilium!gdls.com!
usenet@network.ucsd.edu
Subject: How to calibrate a DVM
To: ham-homebrew@ucsd.edu

I have three digital voltmeters in my shack, none of which agree with the others.

The problem I have is how to calibrate the voltage. I have heard that mercury cells like those used in cameras are quite stable and consistent in voltage and that they can be used to calibrate a meter.

Has anyone had experience with this? Will it work? Is there a better way?

Thanks

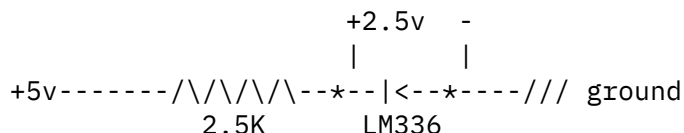
Bill

Date: 1 Nov 93 20:10:04 GMT
From: utcsri!utnut!torn!news2.uunet.ca!math.ohio-state.edu!news.acns.nwu.edu!
casbah.acns.nwu.edu!rdewan@rutgers.rutgers.edu
Subject: How to calibrate a DVM
To: ham-homebrew@ucsd.edu

In article <2b3ol3\$nph@gdls.gdls.com>, Bill Turini <turini@gdls.com> wrote:
>I have three digital voltmeters in my shack, none of which agree with
>the others. The problem I have is how to calibrate the voltage. I
>have heard that mercury cells like those used in cameras are quite
>stable and consistent in voltage and that they can be used to calibrate
>a meter.Has anyone had experience with this? Will it work?
>Is there a better way?

Many companies make precision voltage reference zeners. For example National has LM336 5v unit with +-1% initial tolerance. This is available from Digikey for a nominal amount. (less than \$2?) They also have other more exotic, ovenized sources with tighter tolerances. I suspect that they cost more.

The circuit is simple:



BTW, the LM336 is a three lead device, commonly packaged in the T092 style. The third lead is used for temperature compensation and can be ignored for your purposes.

Rajiv
aa9ch
r-dewan@nwu.edu

Date: 1 Nov 93 13:48:37 GMT
From: auratek!epacyna@uunet.uu.net
Subject: Receiver PCB's For Sale
To: ham-homebrew@ucsd.edu

1. Built and tested receiver PCB from "Better Ears for the MAVTI-40" see QST article in October 1985 pg.14, or QRP Classics pg.140.

The receiver is built on a gold plated (2 sided) PCB about 5"W x 3 1/2"W. It contains all the circuits of Fig. 6. The audio band pass has been optimized for a 600Hz center frequency. Although a 40M double tuned band pass filter is installed, this can easily be changed for the receiver to operate on any band. The PCB also includes T/R keying and antenna change over. Just add a VFO for a fully functional receiver. I recommend the NG1G premixed VFO (see QRP Quarterly) since the VFO buffer to drive the SBL-1 is on the PCB and this would allow you to build for any band. Add a transmitter and

sidetone and you can build a complete transceiver around this module. One notable feature of this receiver circuit is the notch filter which works quite well. Price does not include the few components that are chassis mounted (e.g. jacks, pots etc.). Full documentation included. Price \$50.00

2. Set of (3) PCB's for the "Ugly Weekender II" see QST June 1992 and 1992 ARRL Handbook. Price is \$10 with documentation.

Or, I will furnish a complete parts kit for this transceiver with these boards (less 7Mhz calibration osc., enclosure, knobs and jacks) for \$50.

Shipping is not included in any of the above prices.

Ed Pacyna W1AAZ email: ed@auratek.com telephone: (617) 290-4800 X114

Date: 2 Nov 93 01:13:58 GMT
From: ogicse!uwm.edu!linac!att!cbnewse!parnass@network.ucsd.edu
Subject: setting up a work bench.
To: ham-homebrew@ucsd.edu

There's currently a discussion about workbenches for *woodworking* in rec.woodworking, but I assume you want one for electronics.

For over 15 years I have used the following scheme for electronics workbenches with success.

I employ two 2-drawer file cabinets to support a top, which is actually a solid core wooden door, obtained as a reject from a lumber store. On top of that, I placed steel shelves to hold a scope, lot of meters, sig jennies, etc.

Instead of building a 6 foot tall set of shelves, I built two sets of 3 foot tall shelves and sat them on top of my workbench side by side. I used industrial steel shelving, but you could the cheaper Hirsch "Erector Set-type" steel shelving available at most home center stores.

Lots of test equipment sit on the shelves, plugged into a 6' long AC outlet strip which rests at the rear of one of the shelves.

I store equipment repair and user manuals in the file cabinets.

PS - Scott Landis' "The Workbench Book" is a good book if you are considering a woodworking bench. It's published by Taunton Press.

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Copyright 1993, Bob Parnass, AJ9S
AT&T Bell Laboratories - parnass@ih4gp.att.com - (708)979-5414

Date: 1 Nov 93 16:07:35 CST
From: timbuk.cray.com!hemlock.cray.com!cherry10!dadams@uunet.uu.net
Subject: setting up a work bench.
To: ham-homebrew@ucsd.edu

I think I need to build a workbench down stairs as one of my first projects.
Any suggestions as far as what to think ahead about design wise? I intend
to buy some cheap lumber at Knox or Menards etc. They have a workbench
kit based on 2x4's. Also shelve frames etc.

(I probably ought to have something to clip an anti static wrist strap
to for one.)

I think I want to place some rugged shelves above the workbench to
place (possibly heavy) test equipment, parts, reference books, etc.
(The scope I just got is heavy, and I don't want to move it around much.
I would like to be able to set it on the shelf and just use it there
most of the time. I suppose there will be plenty of times when the piece
of work is bigger and heavier than the scope. Hmm, maybe I could put
wheels on the workbench? This would let me move it around downstairs,
but I would still need to remove it if I want to take it out to the
garage etc.)

The basement has tile floor on cement. I don't think that would be
too conducive to static. Is there anything else I ought to think of
this way?

I wonder if I should try to have some strong ground material there.
I can't really drive a copper pole into the ground there, but I could
have some iron pipes to hang things on and I could attach test equipment
to these with bradded metal strips, and attach these to the main water pipe
or sewer pipe? I don't know if this is useful. If I get HF equipment installed
there and an antenna connection anywhere near it might prevent some lightening
damage if the lightening strike is not to close.

Any other suggestions about where to place things?

Sourdough and Ham KG0IO/AE

--David C. Adams dadams@cray.com
Statistician
Cray Research Inc.

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| | | obten comida,
| | | y sal de aqui!
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End of Ham-Homebrew Digest V93 #91
